# Neuroscience Center of Excellence
## LSU Health Sciences Center School of Medicine, New Orleans

# SEMINAR

## Cytosolic Phospholipase $A_2$ and Cyclooxygense-2 in Excitotoxic Neuronal Degeneration

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Brain cells *in situ* contain low concentrations of the free polyunsaturated fatty acids arachidonic acid. Following various pathological insults, including cerebral ischemia, traumatic brain injury, and epilepsy, arachidonic acid is released rapidly from cellular membrane phospholipids in an NMDA receptor-dependent manner. In this lecture, Dr. Sandra Hewett will discuss the contribution of cyclooxygenase-2 activation to NMDA-induced neuronal cell death both *in vitro* and *in vivo*. In addition, she will reveal which paralog of cytosolic phospholipase $A_2$ is responsible for NMDA-induced arachidonic acid release.

**September 29, 2006, 12:00-1:00pm, 8th Floor Neuroscience Center Conference Room, LSU Lion's Building, 2020 Gravier Street**